

Current Glider Track and Location

04/07/2011 @ 1110 Local

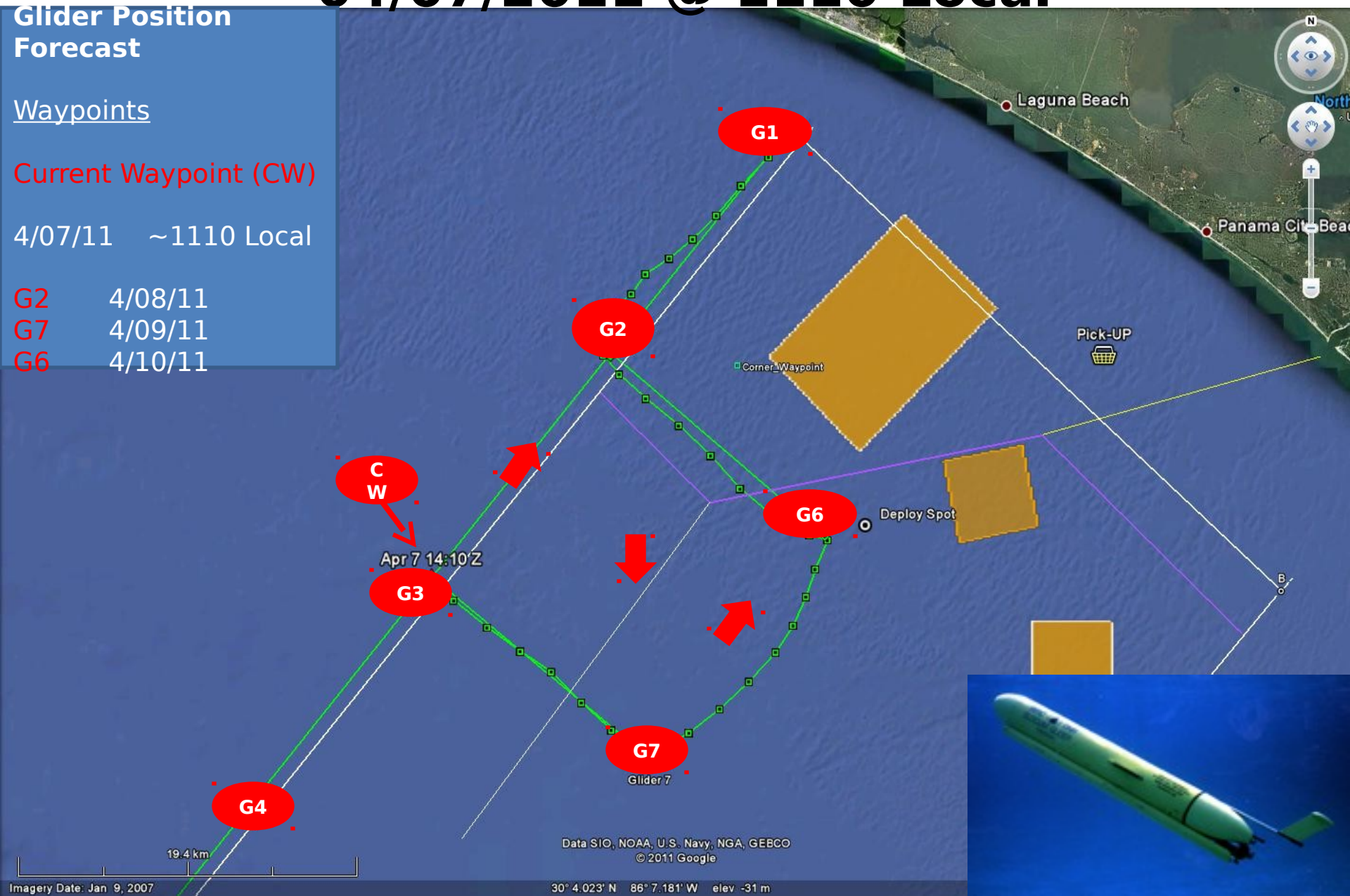
Glider Position Forecast

Waypoints

Current Waypoint (CW)

4/07/11 ~1110 Local

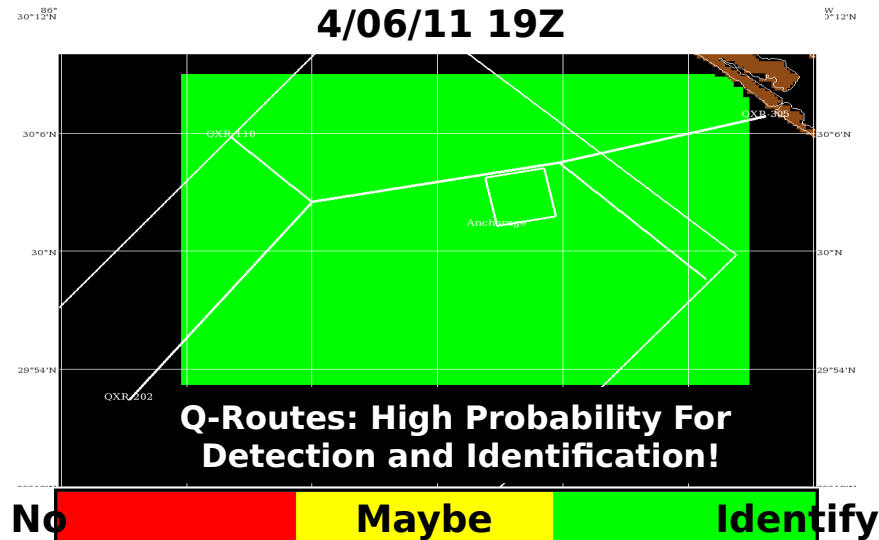
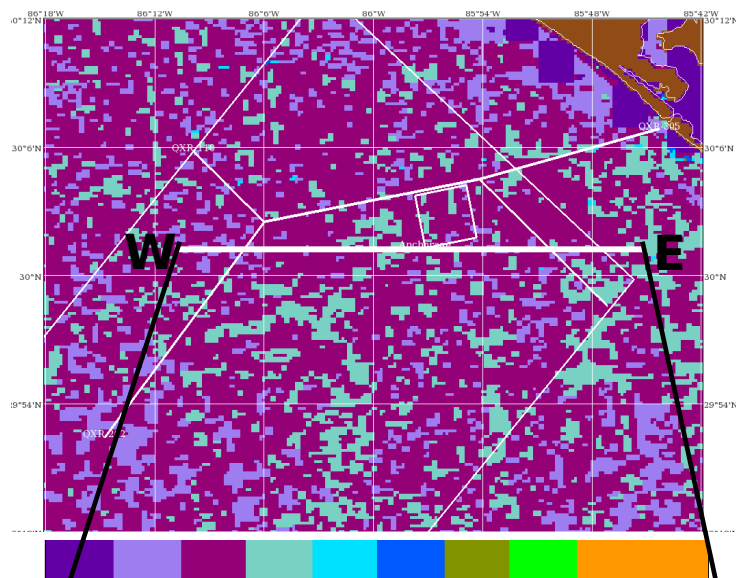
G2	4/08/11
G7	4/09/11
G6	4/10/11



Nowcast AQS-24 Support for April 06, 2011 19Z

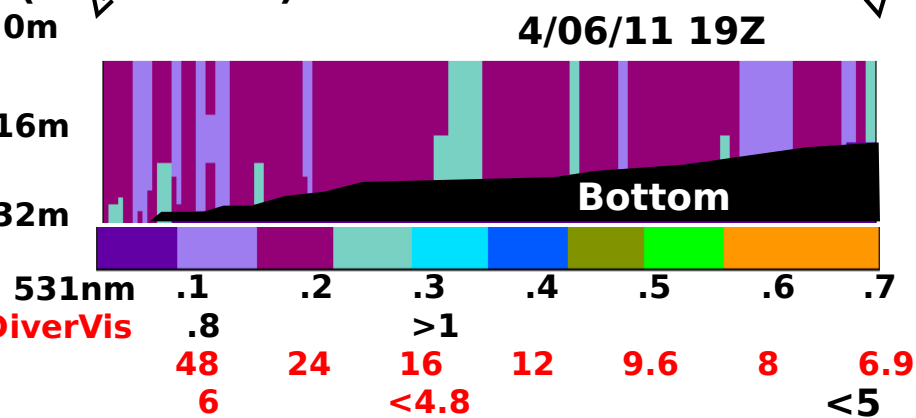
Surface Beam-c / Diver Visibility 4/06/11 19Z

Target Identification @ 6m Tow Altitude 4/06/11 19Z

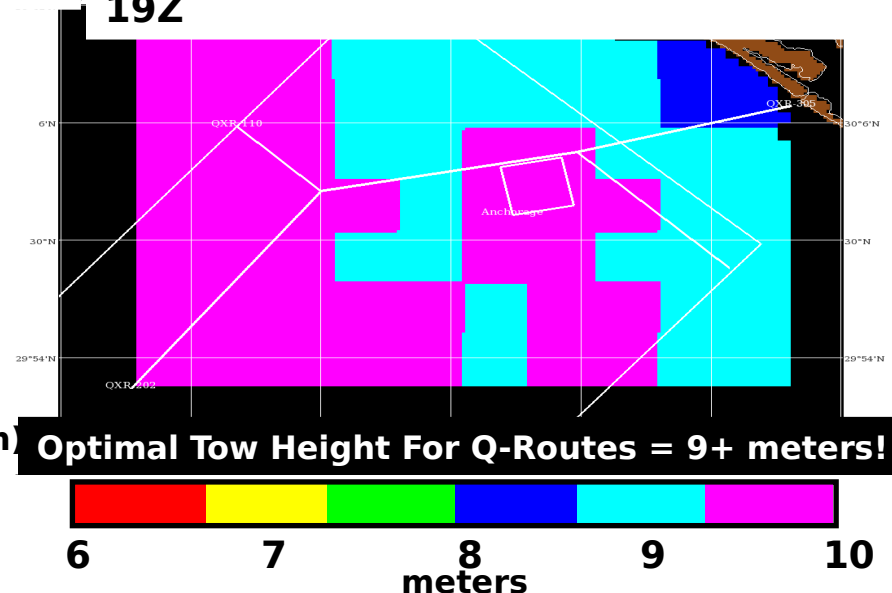


c 531nm
m
Diver Vis
3D Beam-c / Diver Visibility Slice
(West->East)
4/06/11 19Z

0m	.1	.2	.3	.4	.5	.6	(1/meters) meters
.8	.1	.2	.3	.4	.5	.6	
48	24	16	12	9.6	8	6.9	
6	<4.8						



Optimal Tow Altitude - 4/06/11 19Z



Optimal Tow Height For Q-Routes = 9+ meters!

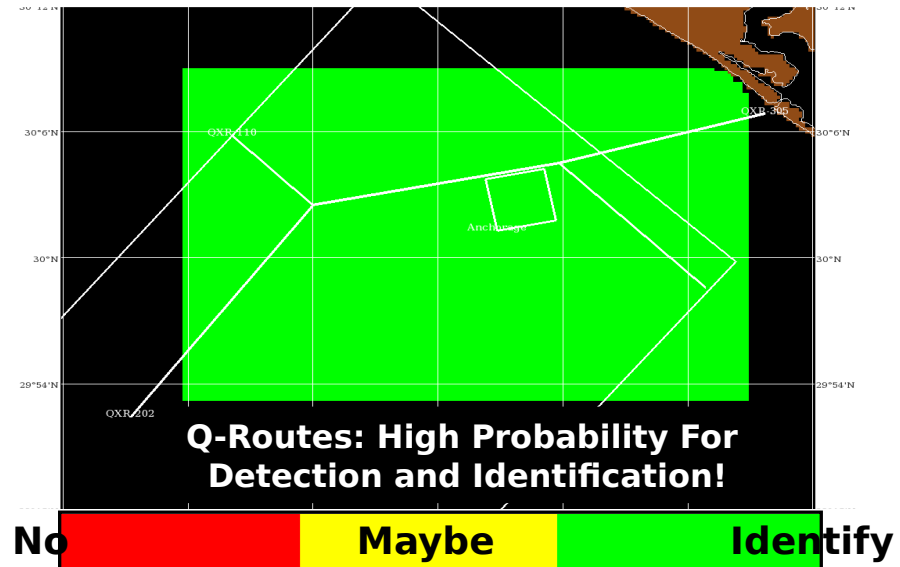
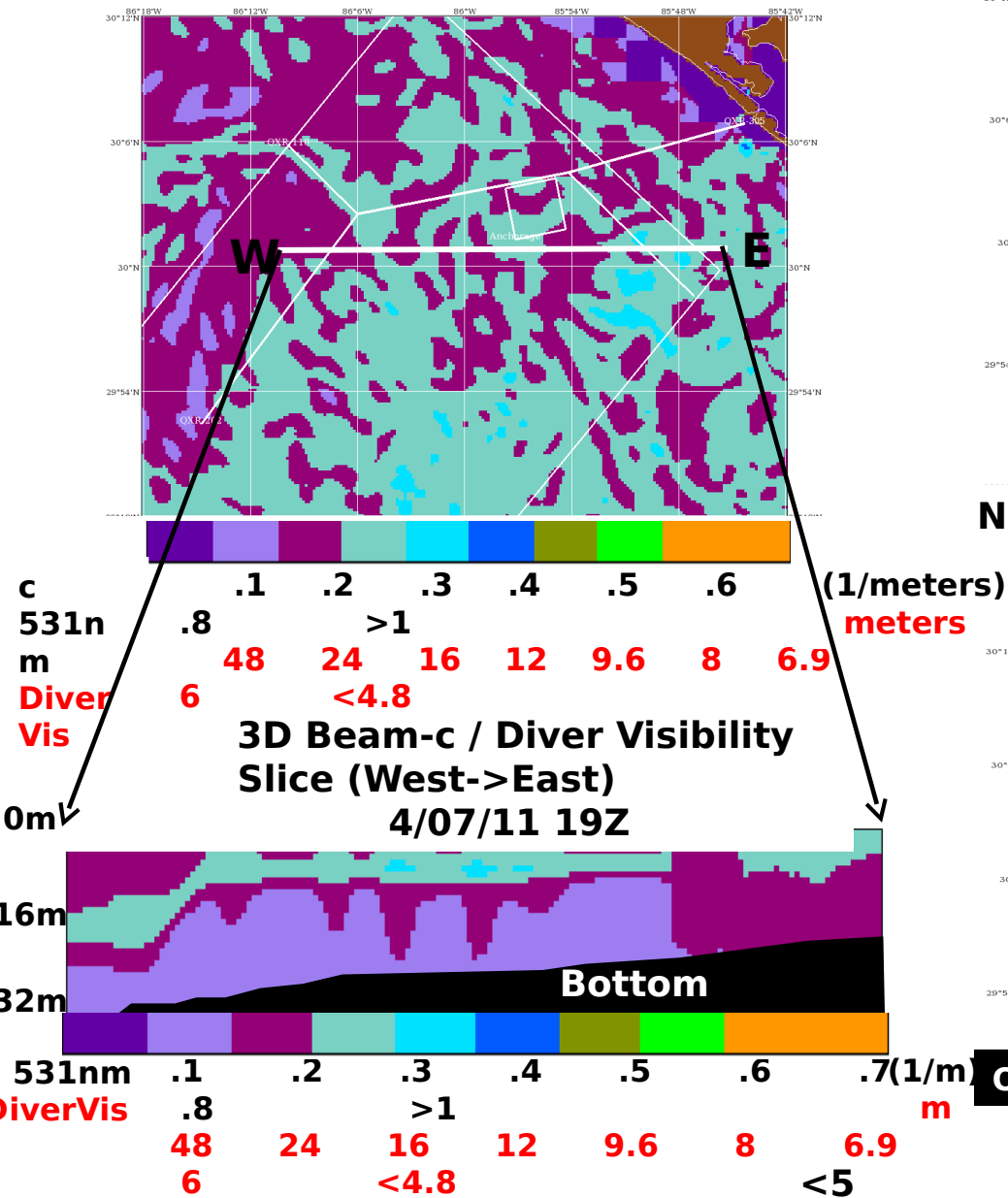
24 Hour Forecast AOS-24 Support for April 07, 2011 19Z

Surface Beam-c / Diver Visibility

4/07/11 19Z

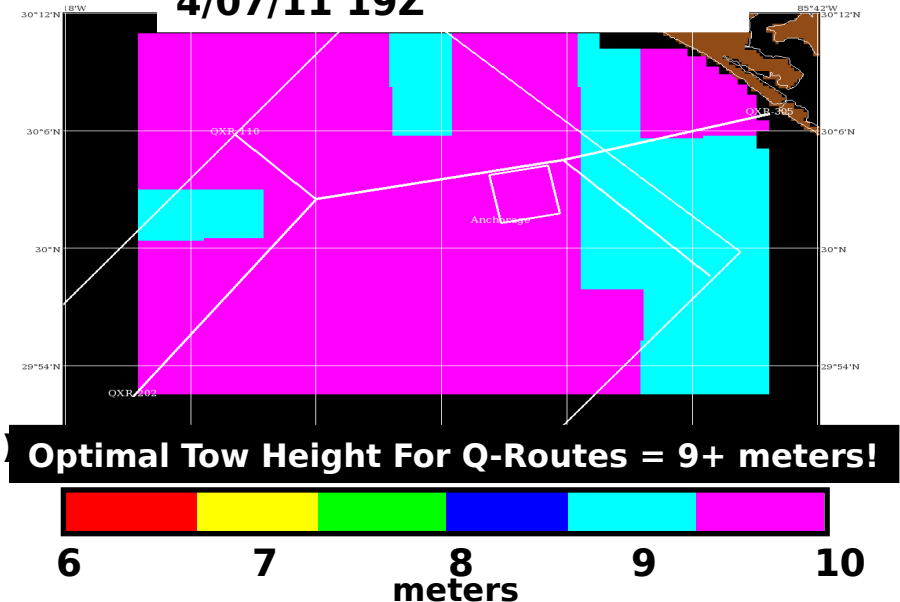
Target Identification @ **6m** Tow Altitude

4/07/11 19Z



Optimal Tow Altitude

4/07/11 19Z



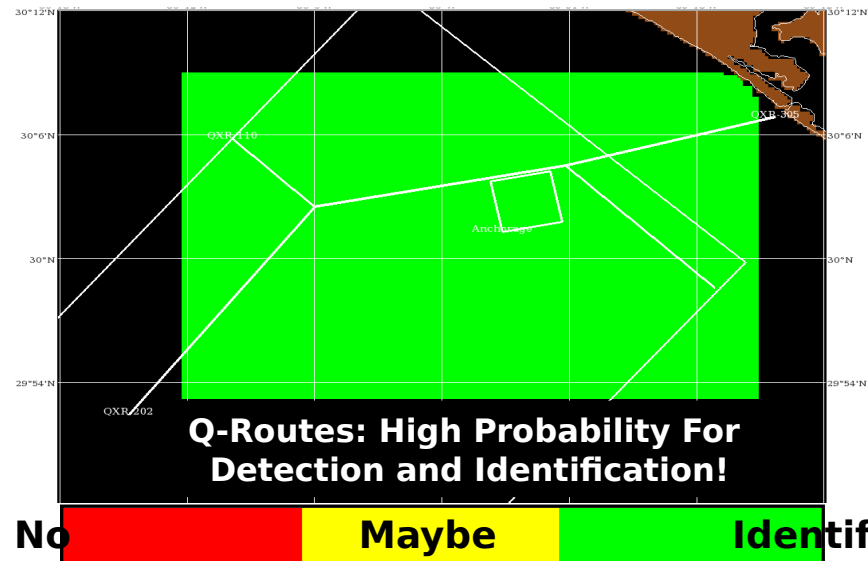
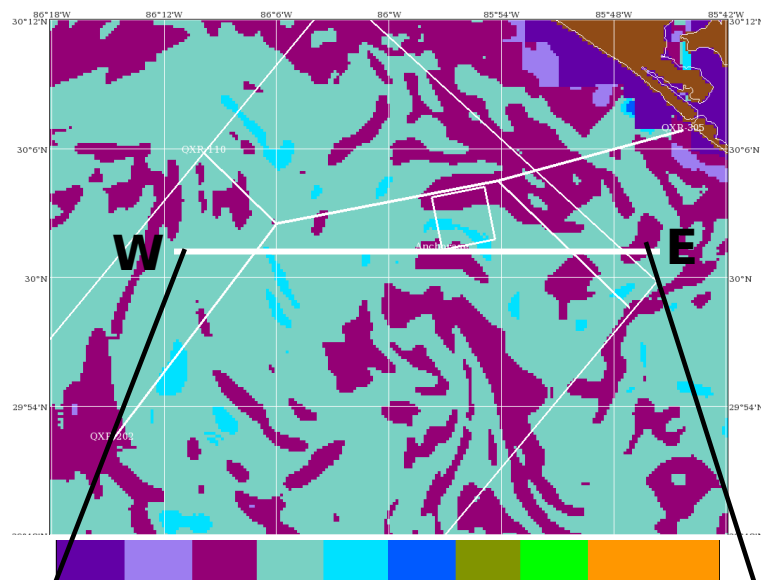
48 Hour Forecast AOS-24 Support for April 08, 2011 19Z

Surface Beam-c / Diver Visibility

4/08/11 19Z

Target Identification @ 6m Tow Altitude

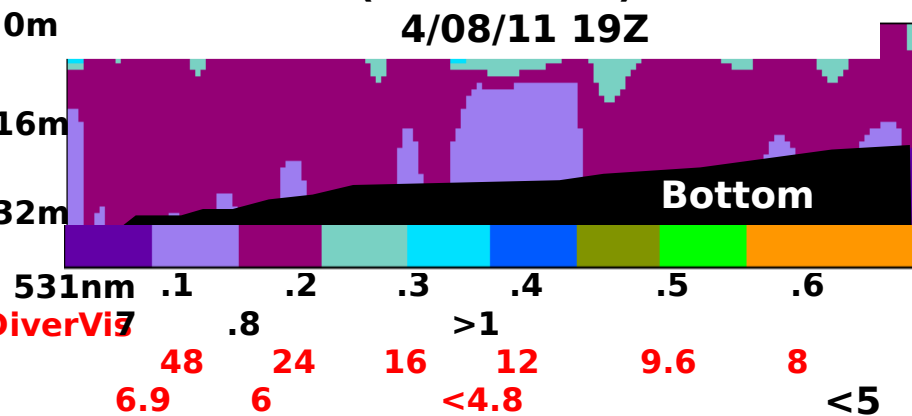
4/08/11 19Z



531m
Diver Vis

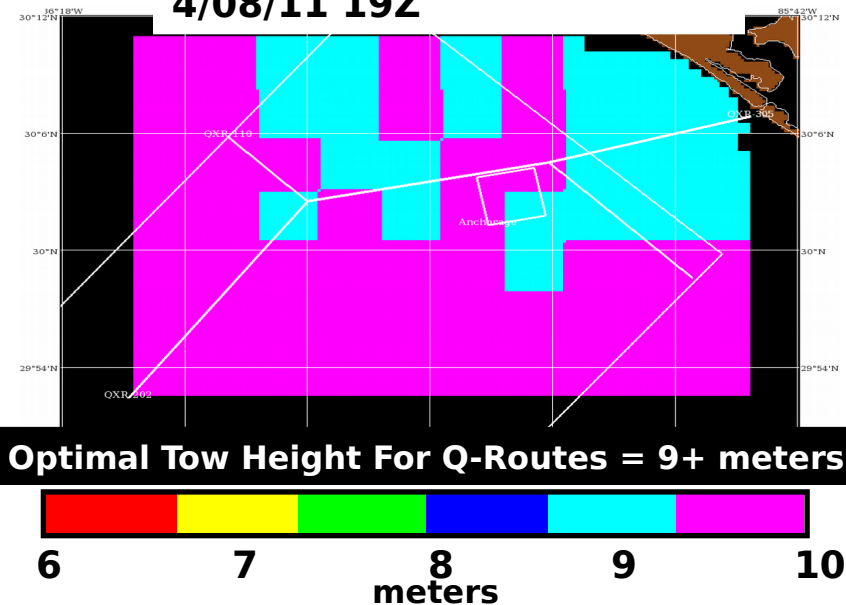
3D Beam-c / Diver Visibility Slice (West->East)

4/08/11 19Z



Optimal Tow Altitude

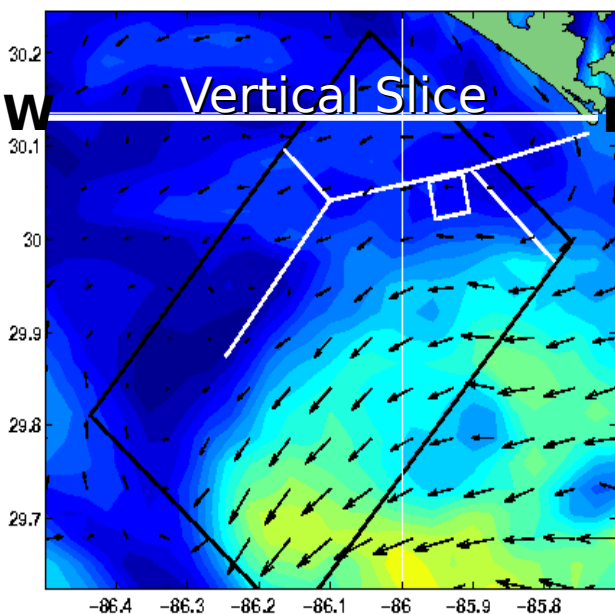
4/08/11 19Z



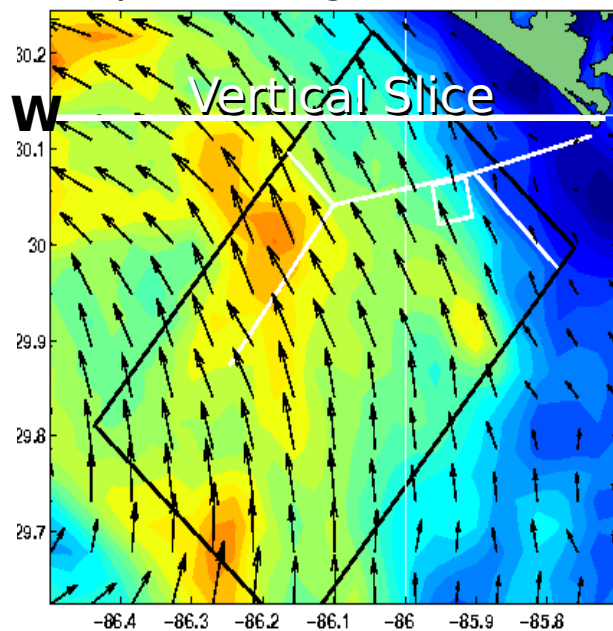
Optimal Tow Height For Q-Routes = 9+ meters!

Physical Model Nowcast & Forecast – April 06, 2011

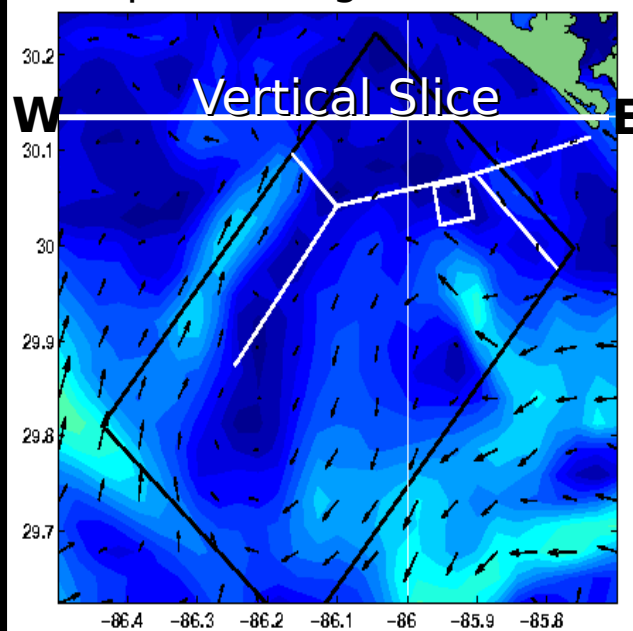
April 06, 2011 00Z
Depth Averaged Currents



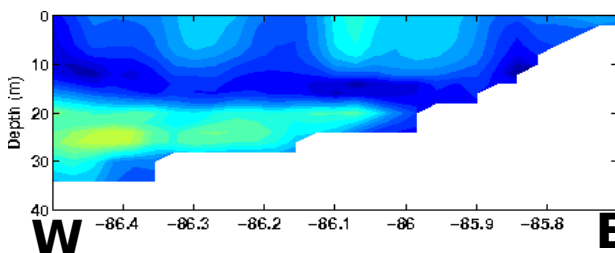
April 07, 2011 00Z
Depth Averaged Currents



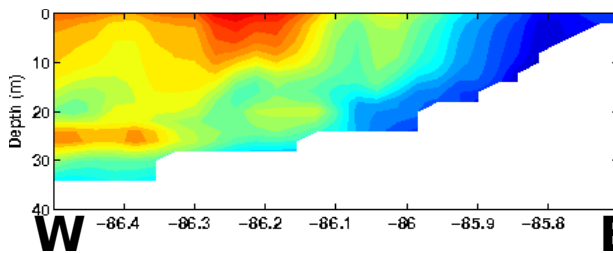
April 08, 2011 00Z
Depth Averaged Currents



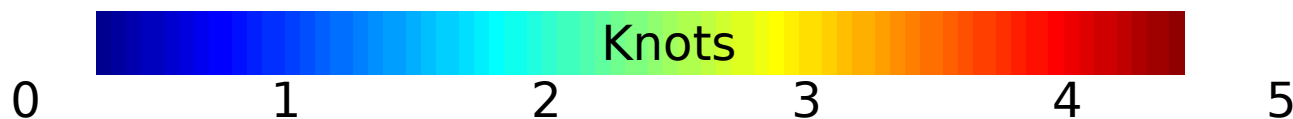
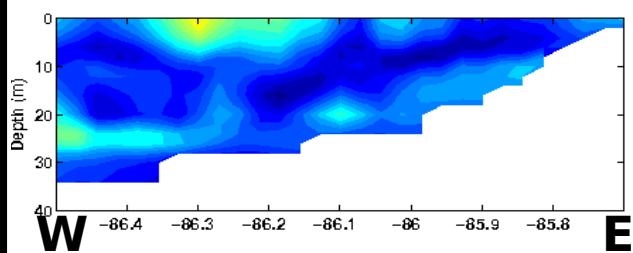
Vertical Slice Velocity @ 30.14N



Vertical Slice Velocity @ 30.14N



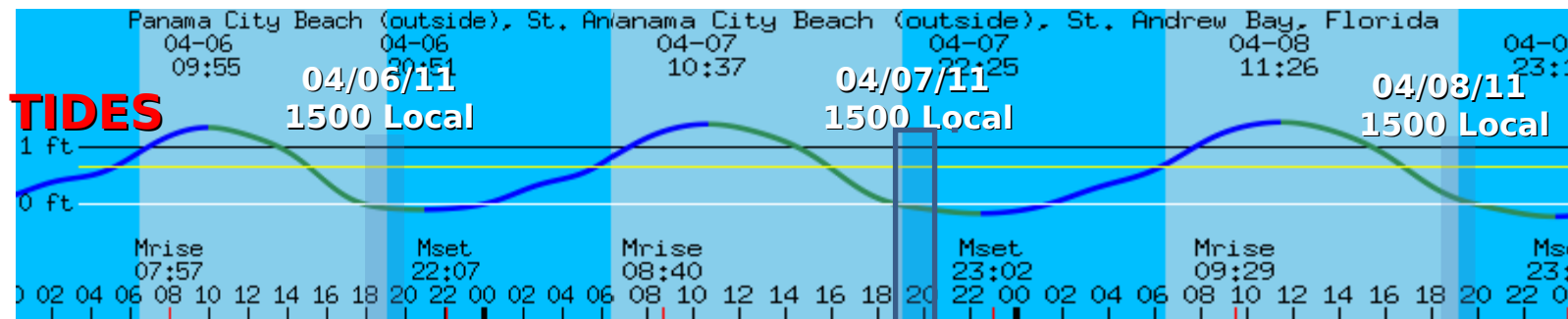
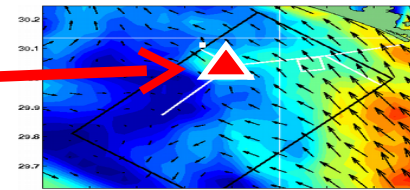
Vertical Slice Velocity @ 30.14N



04/06/2011

TIME SERIES @ 30.05N, 86.1W

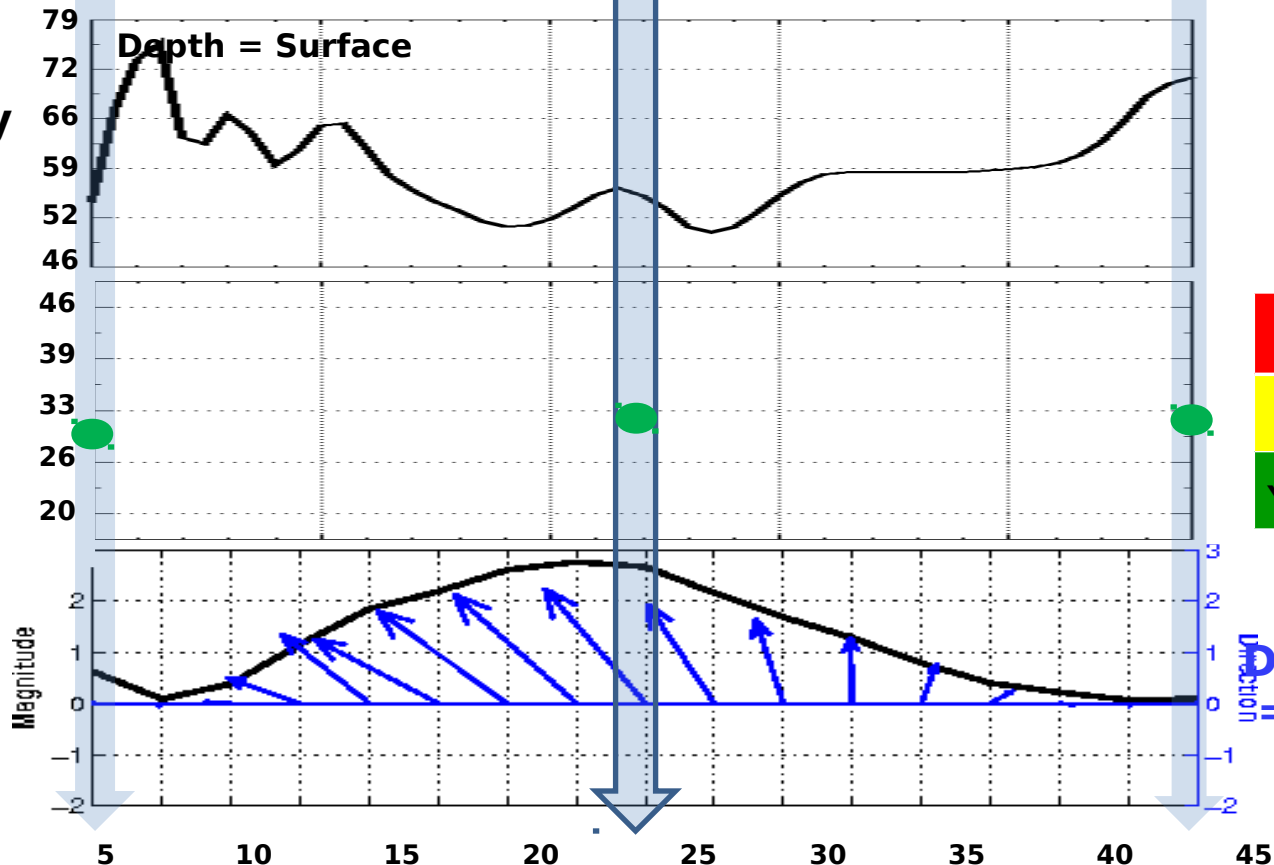
FORECAST OVER NEXT 48 HOURS



**Horizontal
Diver Visibility
Forecast
(Feet)**

**Optimal
Tow
Altitude
(Feet)**

**Modeled
Depth
Averaged
Currents
(Knots)
=Solid Line**



**No Target
ID?**

**?
Color
Of
Circle**

**Yes
Circle**

**Direction
= Vectors**

Summary

- 1.** Surface and subsurface turbidity (beam-c) range from 0.1-0.5 m^{-1} in op-area for today (04/06/11 19Z), tomorrow (04/07/11) and for 48 hour forecast (04/08/11 19Z). (See Slides 2,3,4)
- 2.** Surface and subsurface diver visibility (horizontal) range from 29-100+ feet in op-area for today (04/06/11 19Z), tomorrow (04/07/11 19Z) and for 48 hour forecast (04/08/11 19Z). (See Slides 2,3,4)
- 3.** Sytem Performance: Today (04/06/11 19Z), tomorrow (04/07/11 19Z) and 48 Hour Forecast (04/08/11 19Z) expect ID and Detection over 100% in Q-Routes.
- 4.** Today (04/06/11 19Z), tomorrow (04/07/11 19Z) and 48 hour forecast (04/08/11 19Z) predicted tow heights range from 29-36 feet in Q-Routes. (See Slides 2,3,4)
- 5.** Time Series at Surface for Location 30.05N and 86.1W: Horizontal Diver Visibility ranges from 50 to 70 feet during period starting 04/06/11 19Z to 4/8/11 19Z. Optimal Tow Height is ~30 feet during same 48 hour period yielding high probability of target ID. Surface currents during the same 48

Note: Good satellite scenes collected on 3/25/11, 4/01/11, 4/03/11 & 4/6/11

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Feedback Very Important!

Positive or Negative
How are products being used?
Changes/Needs/Suggestions